

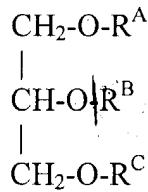
1. A lipid-based drug delivery system for administering an active lysolipid drug substance, which is not a substrate for lysophospholipase, to tissues expressing increased levels of extracellular phospholipase A2, comprising:

- (a) a prodrug lipid derivative having:
 - (1) An alkyl-linked aliphatic group of a length of at least 7 carbon atoms;
 - (2) An acyl-linked organic radical having at least 7 carbon atoms, and
 - (3) A hydrophilic moiety, and
- (b) at least one lipopolymer or glycolipid.

15. A method for selectively drug targeting to neoplastic cells within a mammal having an extracellular phospholipase A2 activity which is at least 25% higher compared to the normal activity in said areas, by administering to the mammal in need thereof an efficient amount of the lipid-based drug delivery system according to claim 1.

57. A lipid-based drug delivery system for administering an active lysolipid drug substance, which is not a substrate for lysophospholipase, to tissues expressing increased levels of extracellular phospholipase A2, comprising:

- (a) a prodrug lipid derivative having the formula:



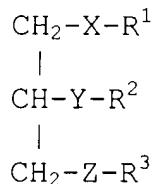
wherein R^A is an ether-linked fatty acid chain having at least 7 carbon atoms, R^B is an acyl-linked fatty acid chain having at least 7 carbon atoms and R^C is chosen from the group consisting of phosphatidic acid, phosphatidyl choline, phosphatidyl glycerol and phosphatidyl serine; and

- (b) at least one lipopolymer or glycolipid.

64. A method for selectively drug targeting to neoplastic cells within a mammalian body having a extracellular phospholipase A2 activity which is at least 25% higher compared to the normal activity in said areas, by administering to the mammal in need thereof an efficient amount of the lipid-based drug delivery system according to claim 57.

72. A lipid-based drug delivery system for administering an active lysolipid drug substance, which is not a substrate for lysophospholipase, to tissues expressing increased levels of extracellular phospholipase A2, comprising:

(a) a prodrug lipid derivative having the formula:



wherein

X and Z are O;

Y is $-\text{OC(O)}-$, Y then being connected to R² via either the oxygen or carbonyl carbon atom;

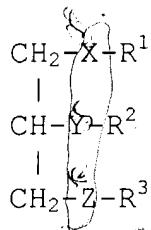
R¹ and R² are each independently an alkyl group $(\text{CH}_2)_n\text{CH}_3$, where n is any one of 11-29; and

R³ is an acyl-linked fatty acid chain having at least 7 carbon atoms and R^c is chosen from the group consisting of phosphatidic acid, phosphatidyl choline, phosphatidyl glycerol and phosphatidyl serine; and

(b) at least one lipopolymer or glycolipid.

71. A lipid-based drug delivery system for administering an active lysolipid drug substance, which is not a substrate for lysophospholipase, to tissues expressing increased levels of extracellular phospholipase A₂, comprising:

(a) a prodrug lipid derivative having the formula:



wherein

X and Z independently are selected from O, CH₂, NH, NMe, S, S(O), and S(O)₂;

Y is -OC(O)-, Y then being connected to R² via either the oxygen or carbonyl carbon atom;

R¹ is an aliphatic group of the formula Y¹Y²; where Y¹ is -(CH₂)_{n1}-(CH=CH)_{n2}-(CH₂)_{n3}-(CH=CH)_{n4}-(CH₂)_{n5}-(CH=CH)_{n6}-(CH₂)_{n7}-(CH=CH)_{n8}-(CH₂)_{n9}, and the sum of n₁+2n₂+n₃+2n₄+n₅+2n₆+n₇+2n₈+n₉ is an integer of from 9 to 29; n₁ is zero or an integer of from 1 to 29, n₃ is zero or an integer of from 1 to 20, n₅ is zero or an integer of from 1 to 17, n₇ is zero or an integer of from 1 to 14, and n₉ is zero or an integer of from 1 to 11; and each of n₂, n₄, n₆ and n₈ is independently zero or 1; and Y² is CH₃ or CO₂H; where each Y¹-Y² independently may be substituted with halogen or C₁₋₄-alkyl,

R² an alkyl group (CH₂)_nCH₃ where n is any one of 11-29; and

R³ is an acyl-linked fatty acid chain having at least 7 carbon atoms and R^c is chosen from the group consisting of phosphatidic acid, phosphatidyl choline, phosphatidyl glycerol and phosphatidyl serine; and

(b) at least one lipopolymer or glycolipid.